DOCUMENT RESUME

ED 321 489 EC 231 810

AUTHOR Torrance, E. Paul; Goff, Kathy
TITLE Fostering Academic Creativity in Gifted Students. ERIC Digest #E484.
INSTITUTION Council for Exceptional Children, Reston, Va.; ERIC Clearinghouse on Handicapped and Gifted Children, Reston, Va.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO EDO-EC-90-3
PUB DATE 90
CONTRACT RI88062007
NOTE 3p.
PUB TYPE Information Analyses - ERIC Information Analysis Products (071)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Child Rearing; *Creative Development; *Creativity; Elementary Secondary Education; *Gifted; Individual Differences; Individual Needs; Parent Attitudes; *Parent Child Relationship; Student Needs; Teacher Attitudes; *Teacher Student Relationship
IDENTIFIERS ERIC Digests

ABSTRACT

This digest describes academic creativity and offers suggestions for its development in gifted students. Creative learning and learning by authority are contrasted and examples of each are given. The naturally creative behavior of young children is noted. Among suggestions offered to teachers are: respect the unusual questions of children; show children that their ideas have value by listening and considering them; and provide chances for children to learn and discover without threats of immediate evaluation. Among suggestions offered to parents are: provide opportunities for creative expression, problem solving, and constructive response to change and stress; find creative ways to resolve conflicts between family members; and ensure that every family member receives individual attention and respect. Noted are ways adults can kill creativity in children, by insisting that children do things the "right way"; making comparisons with other children; and discouraging children's curiosity. Includes 14 references or other resources. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED321489

ERIC Clearinghouse on Handicapped and Gifted Children
THE COUNCIL FOR EXCEPTIONAL CHILDREN
1920 Association Drive • Reston, VA 22091-1589
FAX (703) 264-9494

ERIC Digest

DIGEST #E484 EDO-EC-90-3

FOSTERING ACADEMIC CREATIVITY IN GIFTED STUDENTS

What Is Meant by Academic Creativity?

Academic creativity is a way of thinking about, learning, and producing information in school subjects such as science, mathematics, and history. Few experts agree on a precise definition, but when we say the word, everyone senses a similar feeling. When we are creative, we are aware of its special excitement.

Creative thinking and learning involve such abilities as evaluation (especially the ability to sense problems, inconsistencies, and missing elements); divergent production (e.g., fluency, flexibility, originality, and elaboration); and redefinition. Creative learning is a natural, healthy human process that occurs when people become curious and excited. In contrast, learning by authority requires students to use thinking skills such as recognition, memory, and logical reasoning—the abilities most frequently assessed by traditional tests of intelligence and scholastic aptitude. Children prefer to learn in creative ways rather than just memorizing information provided by a teacher or parents. They also learn better and sometimes faster.

Three questions illustrate the difference between learning information provided by an adult or textbook and creative learning:

1. In what year did Columbus discover America? (The answer, 1492, requires recognizing and memorizing information.)
2. How are Columbus and an astronaut similar and different? (The answer requires more than memorization and understanding; it requires students to think about what they know.)
3. Suppose Columbus had landed in California. How would our lives and history have been different? (The answer requires many creative thinking skills including imagining, experimenting, discovering, elaborating, testing solutions, and communicating discoveries.)

Creative Behavior of Young Children

Young children are naturally curious. They wonder about people and the world. By the time they enter preschool, they already have a variety of learning skills acquired through questioning, inquiring, searching, manipulating, experimenting, and playing. They are content to watch from a distance at first; however, this does not satisfy their curiosity. Children need opportunities for a closer look; they need to touch; they need time for the creative encounter.

We place many restrictions on children's desire to explore the world. We discourage them by saying "Curiosity killed the cat." If we were honest, we would admit that curiosity makes a *good* cat and that cats are extremely skilled in testing the limits and determining what is safe and what is dangerous. Apparently children, as well as cats, have an irresistible tendency to explore objects, and this very tendency seems to be the basis for the curiosity and inventiveness of adults. Even in testing situations, children who do the most manipulating of objects produce the most ideas and the largest number of original ideas.

Creative Behavior of School-Age Children

Until children reach school age, it is generally assumed that they are highly creative, with vivid imaginations, and that they learn by exploring, risking, manipulating, testing, and modifying ideas. Although teachers and administrators sometimes believe that it is more economical to learn by authority, research suggests that many things (although not all) can be learned more effectively and economically in creative ways rather than by authority (Torrance, 1977).

What Can Teachers Do?

Wise teachers can offer a curriculum with plenty of opportunities for creative behaviors. They can make assignments that call for original work, independent learning, self-initiated projects, and experimentation. Using curriculum materials that provide progressive warm-up experiences, procedures that permit one thing to lead to another, and activities that make creative thinking both legitimate and rewarding makes it easier for teachers to provide opportunities for creative learning.

The following are some things caring adults can do to foster and nurture creativity:

- We can teach children to appreciate and be pleased with their own creative efforts.
- We can be respectful of the unusual questions children ask.
- We can be respectful of children's unusual ideas and solutions, for children will see many relationships that their parents and teachers miss.
- We can show children that their ideas have value by listening to their ideas and considering them. We can encourage children to test their ideas by using them and communicating them to others. We must give them credit for their ideas.
- We can provide opportunities and give credit for self-initiated learning. Overly detailed supervision, too much reliance on prescribed curricula, failure to appraise

EC 231810

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

BEST COPY AVAILABLE

learning resulting from a child's own initiative, and attempts to cover too much material with no opportunity for reflection interfere seriously with such efforts.

- We can provide chances for children to learn, think, and discover without threats of immediate evaluation. Constant evaluation, especially during practice and initial learning, makes children afraid to use creative ways to learn. We must accept their honest errors as part of the creative process.
- We can establish creative relationships with children—encouraging creativity in the classroom while providing adequate guidance for the students.

What Can Parents Do?

It is natural for young children to learn creatively by dancing, singing, storytelling, playing make-believe, and so forth. One of the first chalienges to creativity may be formal schooling. By this time parents, as well as teachers, appreciate conforming behaviors such as being courteous and obedient, following rules, and being like others. While these are desirable traits to some extent, they may also destroy a child's creative potential.

The following are some positive ways parents can foster and nurture the growth of creativity:

- Encourage curiosity, exploration, experimentation, fantasy, questioning, testing, and the development of creative talents.
- Provide opportunities for creative expression, creative problem-solving, and constructive response to change and stress.
- Prepare children for new experiences, and help develop creative ways of coping with them.
- Find ways of changing destructive behavior into constructive, productive behavior rather than relying on punitive methods of control.
- Find creative ways of resolving conflicts between individual family members' needs and the needs of the other family members.
- Make sure that every member of the family receives individual attention and respect and is given opportunities to make significant, creative contributions to the welfare of the family as a whole.
- Use what the school provides imaginatively, and supplement the school's efforts.
- Give the family purpose, commitment, and courage. (Torrance, 1969, p. 59)

How Adults "Kill" Creativity:

- Insisting that children do things the "right way." Teaching a child to think that there is just one right way to do things kills the urge to try new ways.
- Pressuring children to be realistic, to stop imagining. When we label a child's flights of fantasy as "silly," we bring the child down to earth with a thud, causing the inventive urge to curl up and die.
- Making comparisons with other children. This is a subtle pressure on a child to conform; yet the essence of creativity is freedom to conform or not to conform.
- Discouraging children's curiosity. One of the surest indicators of creativity is curiosity; yet we often brush questions aside because we are too busy for "silly" questions. Children's questions deserve respect.

References

Torrance, E. P. (1969). *Creativity.* Sioux Falls, ND: Adapt Press.

Torrance, E. P. (1977). *Creativity in the classroom.* Washington, DC: National Education Association.

Torrance, E. P., & Goff, K. (1989). A quiet revolution. *Journal of Creative Behavior, 23*(2), 136–145.

Resources for Parents and Teachers

There are numerous textbooks, workshops, instructional materials, videotapes, seminars, and other resources. for use in creative teaching. There are publishers, magazines, and journals that focus on creativity and creative thinking. Some of them include the following:

Publishers

Creative Learning Press, P.O. Box 320, Mansfield Center, CT 96250

D.O.K. Publishers, P.O. Box 605, East Aurora, NY 14052

Foxtail Press, P.O. Box 2996, La Habra, CA 90632-2996

Good Apple, P. O. Box 299, Carthage, IL 62321-0299

Opportunities for Learning, 2041 Nordhoff Street, Chatsworth, CA 91311

Scholastic Testing Service, Inc., 480 Meyer Road, P. O. Box 1056, Bensenville, IL 60106-8056

Teachers and Writers Collaborative, 5 Union Square West, New York, NY 10003

Trillium Press. P. O. Box 209, Monroe, NY 10950

Zephyr Press, P. O. Box 13448, Tucson, AZ 85732-3448

Journals

The Creative Child and Adult Quarterly, 8080 Springvalley Drive, Cincinnati, OH 45236

The Journal of Creative Behavior, 1050 Union Road, Buffalo, NY 14224 (Source: Torrance & Goff, 1989)

Prepared by E. Paul Torrance, Alumni Foundation Distinguished Professor Emeritus, University of Georgia, and Kathy Goff, Research Assistant, University of Georgia, and author of innovative instructional material.

ERIC Digests are in the public domain and may be freely reproduced and disseminated.

This publication was prepared with funding from the U.S. Department of Education, Office of Educational Research and Improvement, under contract no. RI88062007. The opinions expressed in this report do not necessarily reflect the positions or policies of OERI or the Department of Education.